

What is claimed is:

1. A physical user interface to a device having an operating system, comprising:
  - 5 a work surface scanned by one or more sensors;  
the work surface sub-divided into two or more regions;  
each region being representative of a user generated command to the device;  
the one or more sensors adapted to determine the position of one or more counters when  
located on the work surface, and to distinguish which region a counter is located in;
  - 10 the one or more sensors providing an output signal based on said determination;  
the interface adapted to transmit the output signal to the device.
2. The interface of claim 1, further comprising:
  - 15 software on a machine readable media, for installation onto the device, the software  
recognising the output signals and providing appropriate commands to an operating  
system or one or more individual software programs of the device in response to the  
output signals.
- 20 3. The interface of claim 2, wherein:  
  
the one or more sensors in combination with the software can determine an orientation of  
a counter.
- 25 4. The interface of claim 2, wherein:  
  
the worksurface is triangle having at an apex, a single region individually recognisable by  
a sensor.
- 30 5. The interface of claim 3, wherein:  
  
the array is a closest packed triangular array.

6. The interface of claim 1, further comprising:

5 one or more uniquely identifiable RFID counters.

7. The interface of claim 6, wherein:

10 each counter can be associated with a program residing on the device.

8. The interface of claim 6, wherein:

15 at least one counter has two or more RFID transmitters located within it, each RFID transmitter being isolated from the one or more other transmitters in the counter by a magnetic shield layer, each RFID transmitter being thus uniquely associated with a face of the counter.

9. An RFID counter, comprising:

20

a body in which is embedded two RFID transmitters separated by a magnetic shield layer.

10. The counter of claim 9, wherein:

25 each transmitter is sandwiched between two non-ferrous layers.

11. The interface of claim 2, wherein:

30 a change in the output signal causes a cursor or pointer on a display of the device to be temporarily highlighted or automatically repositioned to an elected or default location.

12. The interface of claim 2, wherein:

the software can distinguish both counter location and more than one orientation of a counter; and

the software causing a new command to be sent to the operating system or program when an orientation of a counter changes.

5

13. The interface of claim 12, wherein:

the software interprets successive re-orientation so as to cause a stepping through successive files or open instances of a program associated with the counter.

10

14. The interface of claim 12, wherein:

the software causes a menu bar to be graphically displayed on a user's display, the menu bar showing at least open files or instances of a program and permitting a stepping through and selection of these files or instances from another interface.

15

15. The interface of claim 14, wherein:

the other interface is a keyboard.

20

16. The interface of claim 6, wherein:

at least one of the sensors can also transmit data to a counter's memory.

25

17. The interface of claim 16, further comprising:

a counter with memory that can be written to by the sensors, the memory being able to store data transmitted by the sensors, for use in a subsequent instance of use of the program.

30

18. A physical user interface to a device having an operating system, comprising:

a combination of a sensor for detecting and identifying a physical counter and;  
a physical work surface, wherein;  
the work surface comprises a triangular region with an apex;  
at least the apex indicating a command to the operating system or a program running  
5 under the operating system.

19. The interface of claim 18, wherein:

the combination results in a determination of location and orientation of a counter.  
10

20. A physical user interface to a device having an operating system, comprising:  
  
a three dimensional workspace scanned by one or more sensors;  
the workspace sub-divided into two or more regions;  
15 each region being representative of a user generated command to the device;  
the one or more sensors adapted to determine the position of one or more counters when  
located within the workspace, and to distinguish which region a counter is located in;  
the one or more sensors providing an output signal based on said determination;  
the interface adapted to transmit the output signal to the device.

20

21. An interface to a device having an operating system, the interface comprising:  
  
one or more sensors that are adapted to detect two or more orientations of a counter and  
transmit an output dependent on a selected orientation;  
25 software having as an input, the sensor output;  
the software interpreting the output signal and providing appropriate commands to an  
operating system or one or more individual software programs of the device in response  
to the selected orientation; and  
one or more counters;  
30 the one or more counters having two or more stable orientations provided by a like  
number of isolated, sensor readable features.